MOPAR
ELECTRONIC SPEED CONTROL
PACKING LIST
4318808

1	Servo & Valve Body Assy.	201-2159-401
1	Reservoir, Vacuum, PCSA32	2-2908
1	Switch Assy., Clutch	1-3152
1	Switch Assy., Brake	1-3162
1	Switch Assy., Control	204-2117
1	Module Assy., Electronic	1-3141
1	Package, Small Parts	1-3144
1	Harness, Wire, Master	203-6380-401
1	Instructions, Installation	8-5961
1	Sensor, Reed 8-Pole	4222714
1	Cable Spdmtr. 23"	4312335
1	Cable, Spdmtr. 44"	4312332
1	Vin Card	601-5829-401
1	Hose, Vacuum, 7/32" x 33"	2-2960
1	Hose, Vacuum, 5/32" x 1/2"x 55"	2-2948
1	Bracket, Reservoir Mtg.	4-6871B
1	Bracket, Cable Mtg. (2.2L)	4275976
1	Bracket, Cable Mtg. (2.6L)	4287504
1	Bracket Assy. 1.6L	208-3223
1	Box, Mopar	8-5802
1	Pad, Box	445-1080-401
1	Sealant Package	2-6301
1	Instruction Supplement	601-5844

SCS P10 INC.

SCS P10 INC.

Packed By _____

Weighed By _____

INSTALLATION SUPPLEMENT
FOR
MOPAR ELECTRONIC SPEED CONTROL

FACTORY INSTALLED — ACCESSORY POWER FEED

Some Chrysler Vehicles (P, D, C, V, L, J, E, T cars) **MAY NOT** have an **ACCESSORY POWER FEED** (light blue, 3-cavity molded recepticle) available for electronic speed control system power connection. Therefore, an **ACCESSORY FEED JUMPER** ("yellow" Candelabra) and **5-AMP FUSE** have been kit supplied to allow connection to **FUSE BLOCK** for power. **NOTE:** All vehicles other than those listed should have the **FACTORY INSTALLED LIGHT BLUE** accessory power feed molded recepticle located at lower left side of main instrument panel wiring.

ACCESSORY POWER FEED — G-BODY

a. G-Body vehicles will have a single yellow molded bullet recepticle, located behind fuse block.

INSTALLATION — ACCESSORY FEED JUMPER

☐ 1. Remove **FUSE BLOCK** and install kit supplied "yellow" accessory feed jumper, shown in **FIGURE A**, into cavity **#14** at rear of block. **NOTE:** G-Body vehicles will have a single yellow molded feed jumper already installed to rear of fuse block. **CAUTION:** Refer to **VEHICLE TECHNICAL SERVICE MANUAL** for proper access procedures for removal and replacement of **FUSE BLOCK**. Insure **NEGATIVE** (-) battery cable is disconnected from battery.

☐ 2. Replace fuse block.

☐ 3. Install kit supplied 5-amp fuse into cavity #14.

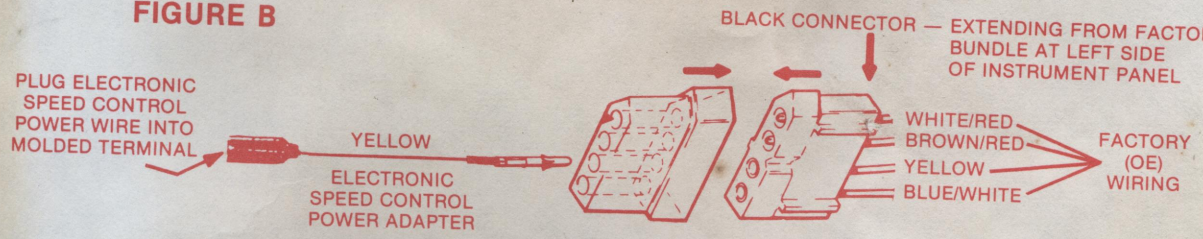
☐ 4. Plug speed control system power wire into accessory feed jumper.

FIGURE A

T-115 VAN — POWER ADAPTER

b. Some T-115 Vans equipped with **REAR DECK RELEASE** or **REAR WINDOW DEFROSTER** will not have a **FACTORY INSTALLED** accessory feed jumper. Therefore, for these vehicles, a **POWER ADAPTER** has been kit supplied to allow connection to factory installed **MECHANICAL SPEED CONTROL** wiring. **FIGURE B.**

FIGURE B



☐ 1. Locate a **BLACK** 4-way connector (4-wires, yellow, white/red, brown/red, blue/white) extending from **FACTORY WIRING BUNDLE** located at **LEFT** lower side of instrument panel wiring. **FIGURE B. NOTE:** Black connector is for **FACTORY MECHANICAL SPEED CONTROL — CONTROL SWITCH LEVER.** Adapter provides connection to yellow (power feed) wire in that 4-way connector.

☐ 2. Plug **POWER ADAPTER**, as shown in **FIGURE B**, into mating **FACTORY** 4-way connector.

☐ 3. Plug **SPEED CONTROL** system power wire into power adapter. **FIGURE B.**

Mopar

Chrysler Plymouth Dodge

ELECTRONIC SPEED CONTROL FOR 1984 CHRYSLER K-E BODY (2.2L, 2.6L) WITH CARBURETOR L BODY (1.6L, 2.2L) WITH CARBURETOR

DODGE	CHRYSLER/PLYMOUTH
OMNI • OMNI CUSTOM • CHARGER • CHARGER 2.2 SHELBY CHARGER • ARIES • ARIES SPEC. EDITION ARIES CUSTOM • DODGE 600	HORIZON • HORIZON CUSTOM • EXECUTIVE SEDAN RELIANT • RELIANT CUSTOM • RELIANT SPEC. EDITION TOWN AND COUNTRY • LE BARON • NEW YORKER

(DOES NOT INCLUDE G,E-BODY TURBO CHARGED OR E.F.I./T.B.I. VEHCILES)

WARNING: INSTALL ONLY ON VEHICLES LISTED. INSTALLATION ON VEHICLES OTHER THAN THOSE LISTED MAY RESULT IN UNSAFE OPERATION

4318808

For installation and service assistance, call collect person to person for Mr. S.C. Chrysler — (817) 332-5348.

For a more comprehensive overview of system installation, refer to Installation Layout or installation diagram before starting installation.

ENGINE COMPARTMENT

☐ 1. Disconnect the negative (-) battery terminal.

PASSENGER COMPARTMENT

SPEED CONTROL COMMAND SWITCH LEVER INSTALLATION

STANDARD TURN SIGNAL SWITCH WITH 2 SPEED W/SHIELD WIPE & WASH

FIGURES 1 , 2 and 3

☐ 2. Vehicles not equipped with intermittent wiper feature must purchase required package.

STEERING COLUMN SPEED CONTROL SWITCH WIRING

FIGURE 1

a. **REMOVE STEERING WHEEL ASSEMBLY. CAUTION:** See **VEHCILE TECHNICAL SERVICE MANUAL** for correct procedure for removing and replacing steering wheel and correct torque for steering wheel mounting nut.

b. Lift turn signal lever up and attach speed control switch wiring to "fish" wire and pull down through column as shown in **FIGURE 1 . NOTE:** Route wiring through trough at bottom of column. Remove (4) buttons from trough and discard -route wiring and replace buttons with new ones provided.

c. Remove and discard (2-speed) switch and shaft assembly. Install new intermittent wiper package as per instructions provided in package.

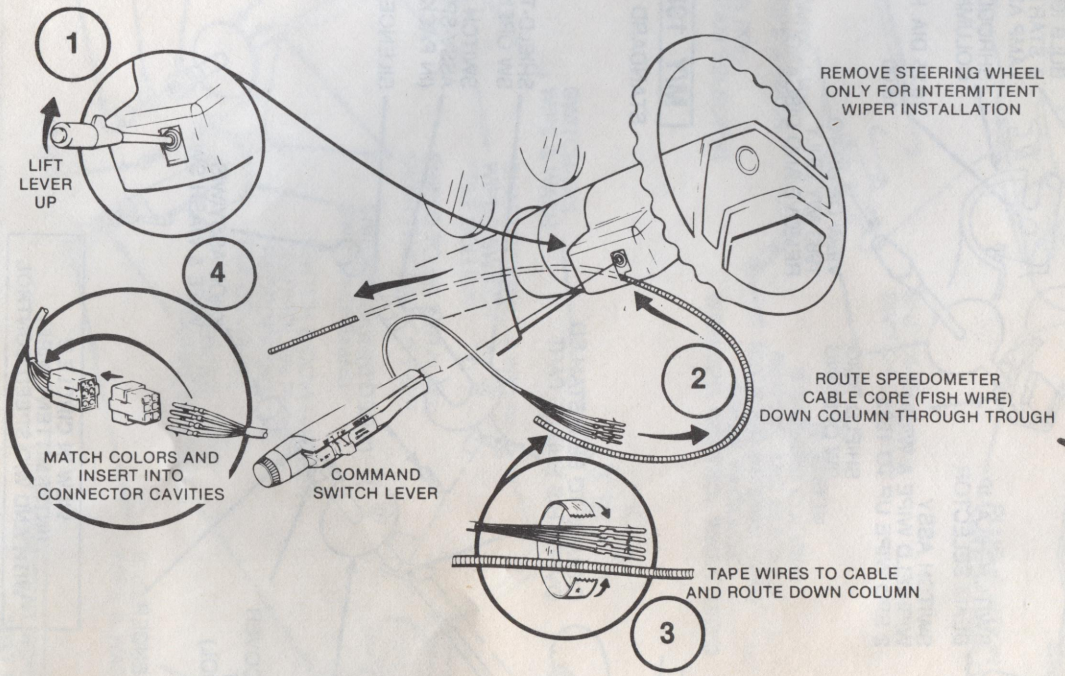
TURN SIGNAL SWITCH WITH INTERMITTENT WIPE

FIGURES 1 , 2 and 3

☐ 3. Vehicles equipped with intermittent wiper switch and shaft assembly: remove shaft cover only and discard. Replace with speed control switch and cover assembly. Do not remove shaft. Route switch harness down steering column as shown in **FIGURE 1 . NOTE:** Vehicles equipped with tilt steering column must specify unique speed control switch and lever cover assembly.

STEERING COLUMN SPEED CONTROL SWITCH WIRING (STANDARD & TILT)

FIGURE 1

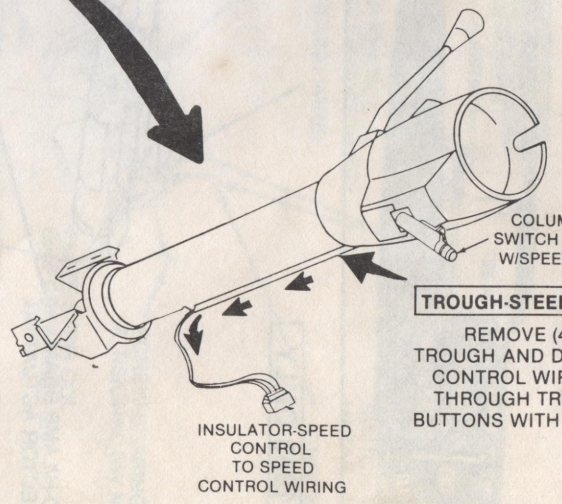


CAUTION

SEE VEHICLE TECHNICAL SERVICE MANUAL FOR CORRECT PROCEDURE FOR REMOVING AND REPLACING STEERING WHEEL AND CORRECT TORQUE FOR STEERING WHEEL MOUNTING NUT

IMPORTANT:

BECAUSE OF POTENTIAL SAFETY HAZARDS, CAUTION SHOULD BE OBSERVED WHEN ROUTING WIRES THROUGH THE COLUMN TO AVOID CHAFING OR GROUNDING.



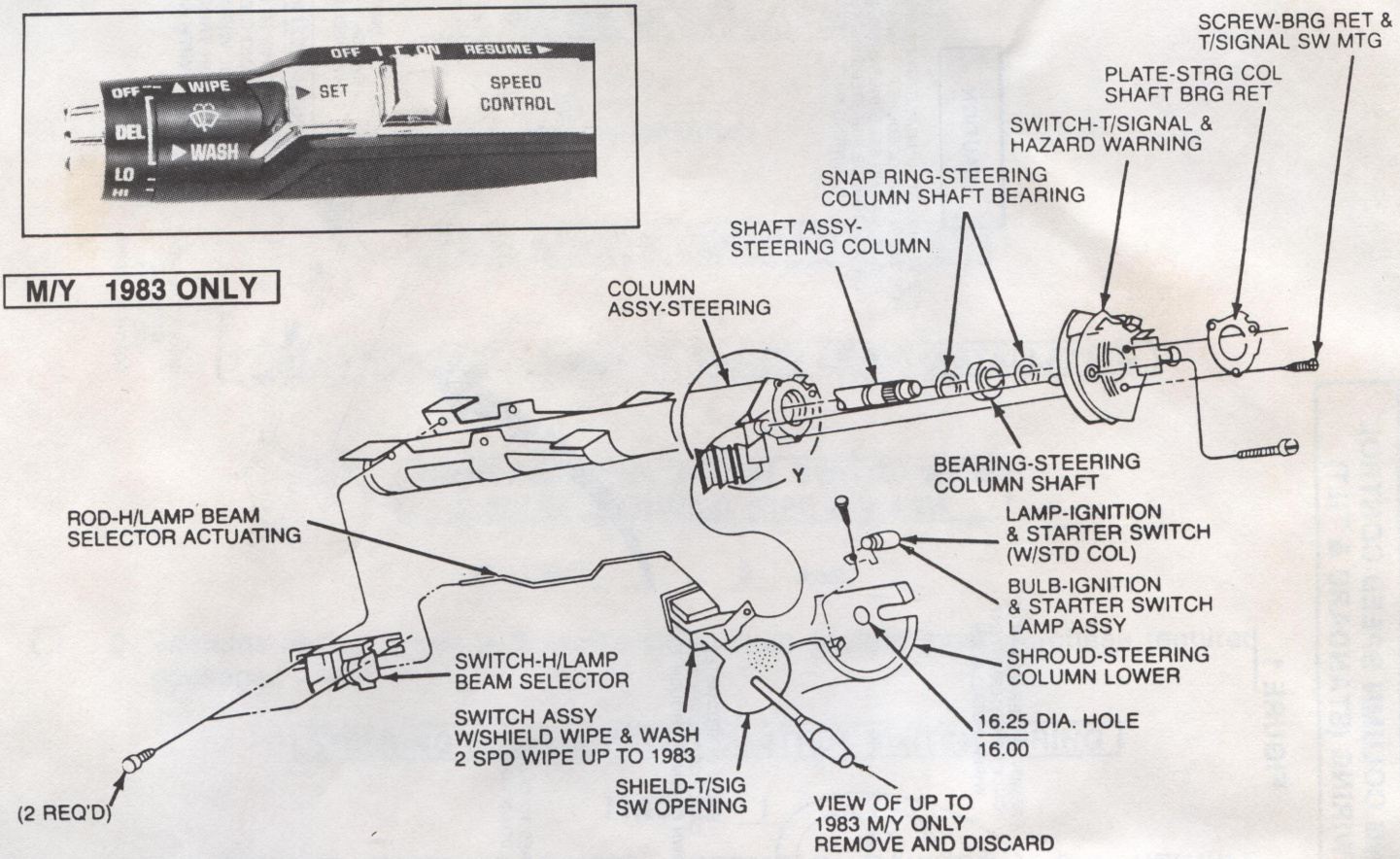
TROUGH-STEERING COLUMN WIRING

REMOVE (4) BUTTONS FROM TROUGH AND DISCARD. ROUTE SPEED CONTROL WIRING DOWN COLUMN THROUGH TROUGH AND REPLACE BUTTONS WITH NEW ONES PROVIDED.

STEERING COLUMN SPEED CONTROL SWITCH — L BODY VEHICLES

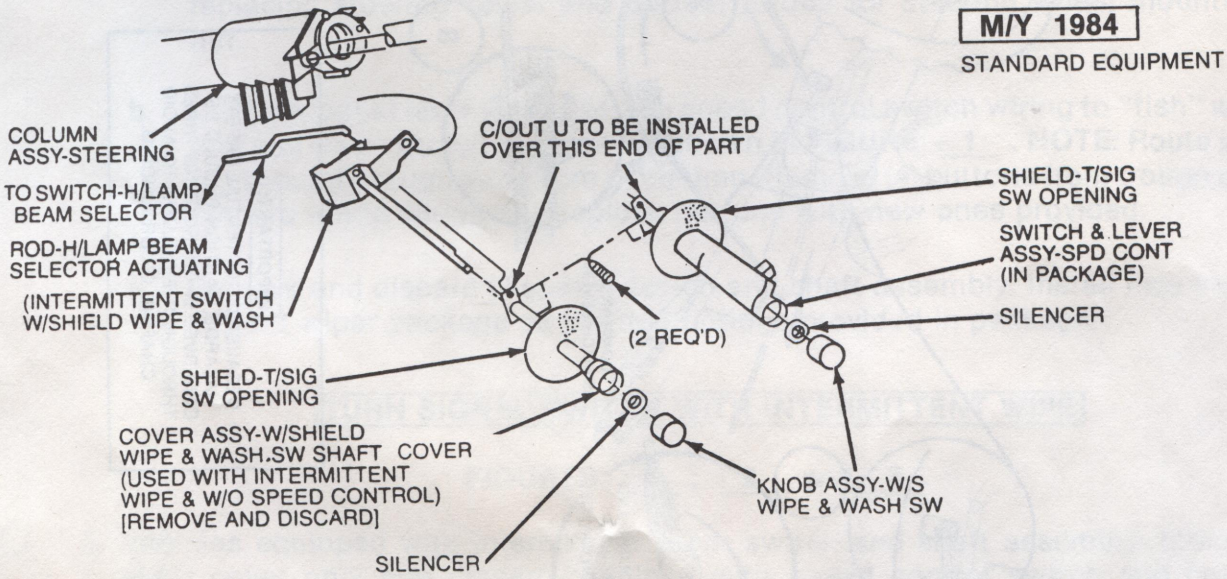
Figure 2

M/Y 1983 ONLY



M/Y 1984

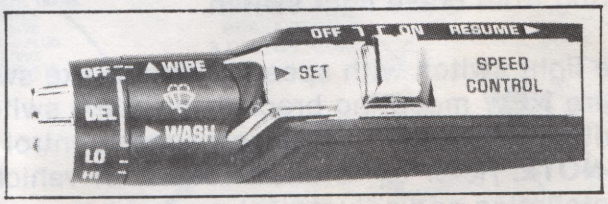
STANDARD EQUIPMENT



VIEW IN CIRCLE Y (INTERMITTENT WIPE) WITH AND W/O SPEED CONTROL

STEERING COLUMN SPEED CONTROL — G/K/E BODY VEHICLES

Figure 3



WIRING TO BE PUSHED DOWN TOWARDS C/OUT D TO CLEAR STEERING WHEEL

SWITCH-T/SIG & HAZARD WARNING

LAMP-IGNITION & STARTER SWITCH KEY (GROUND WIRE)

SWITCH-T/SIG & HAZARD WARNING (GROUND WIRE)

BEARING-STRG COL SHAFT UPPER

HOUSING-STRG COL SHAFT BEARING

SWITCH-IGNITION KEY BUZZER

SCREW-BEARING RET & T/SIGNAL SW MTG

COLUMN ASSY-STEERING

PLATE-STRG COL SHIFT BEARING RET

LAMP-IGNITION & STARTER SWITCH KEY

PLUG-IGNITION SWITCH LAMP OPENING

SHIELD-T/SIGNAL SWITCH OPENING

SWITCH-W/S WIPE & WASH

(2 SPEED) STANDARD COLUMN REMOVE AND DISCARD REORDER INTERMITTENT WIPER PACKAGE WITH SPD. CONTROL WHEN REQ'D

ACTUATOR ROD-H/LAMP BEAM SELECTOR

SWITCH-H/LAMP BEAM SELECTOR

SHIELD-T/SIGNAL SWITCH OPENING

SWITCH & COVER SPEED CONTROL *REORDER-SPECIFY TILT COLUMN

SWITCH-W/S WIPE & WASH

SHAFT-T/SIGNAL & W/SHIELD WIPER SWITCH *TILT COLUMN

SHIELD TO BE INSTALLED OVER THIS END OF PART

SILENCER-T/SIGNAL SW COVER

SHIELD-T/SIGNAL SWITCH OPENING

SHIELD-T/SIGNAL SWITCH OPENING

SWITCH & COVER-SPEED CONTROL (IN PKG.) *REORDER-SPECIFY TILT COLUMN

VIEW (W/O SPD CONT) COVER ASSY-W/SHIELD WIPE AND WASH SWITCH SHAFT (REMOVE AND DISCARD COVER ASSY. ONLY)

SILENCER-T/SIGNAL SW COVER

(2 REQ'D)

KNOB ASSY-W/SHIELD WIPE & WASH SWITCH

SILENCER-T/SIGNAL SW COVER

(2 REQ'D)

KNOB ASSY-W/SHIELD WIPE & WASH SWITCH

(INTERMITTENT WIPER W/SPEED CONTROL) STANDARD COLUMN

(INTERMITTENT WIPER W/SPEED CONTROL) *TILT COLUMN

FACTORY BRAKE LIGHT SWITCH REPLACEMENT

FIGURES 4 and 5

☐ 4. Unplug factory wiring from brake light switch.

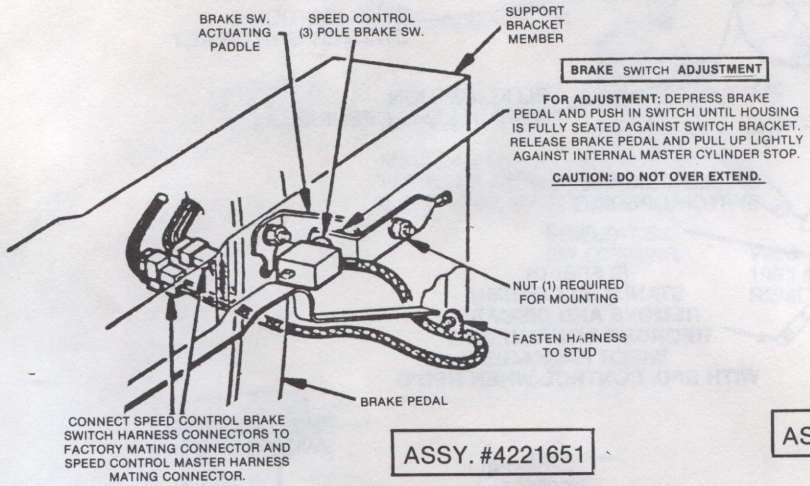
a. Replace brake light switch with speed control brake switch. **NOTE:** L-Body Vehicles require **NEW** mounting bracket for brake switch. Remove factory brake light switch bracket and install new speed control brake switch mounting bracket. **NOTE:** Refer to "Brake Section" of vehicle technical service manual for installation and adjustment procedures.

b. Plug **SPEED CONTROL BRAKE SWITCH** into mating **FACTORY BRAKE SWITCH CONNECTOR.**

c. Plug **SPEED CONTROL BRAKE SWITCH** into mating **BRAKE SWITCH CONNECTOR** from **MASTER SPEED CONTROL HARNESS.**

SPEED CONTROL BRAKE LIGHT SWITCH INSTALLATION FOR K,E AND G BODY VEHICLES

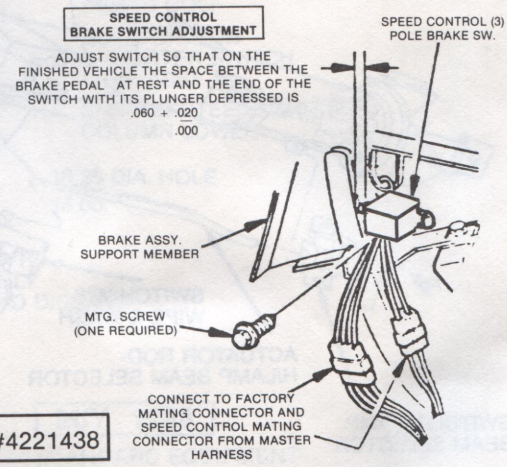
Figure 4



ASSY. #4221651

SPEED CONTROL BRAKE LIGHT SWITCH INSTALLATION FOR "L" BODY VEHICLES

Figure 5



ASSY. #4221438

MANUAL TRANSMISSION — CLUTCH SWITCH

☐ 5. Install appropriate clutch switch assembly as shown in **FIGURE 6** for **K, E-BODY** and **FIGURE 7** for **L-BODY** vehicles.

WIRING — CLUTCH SWITCH

a. Plug the 2-pin clutch connector from the **MASTER SPEED CONTROL HARNESS**into clutch switch as shown in **FIGURES 6 & 7 .**

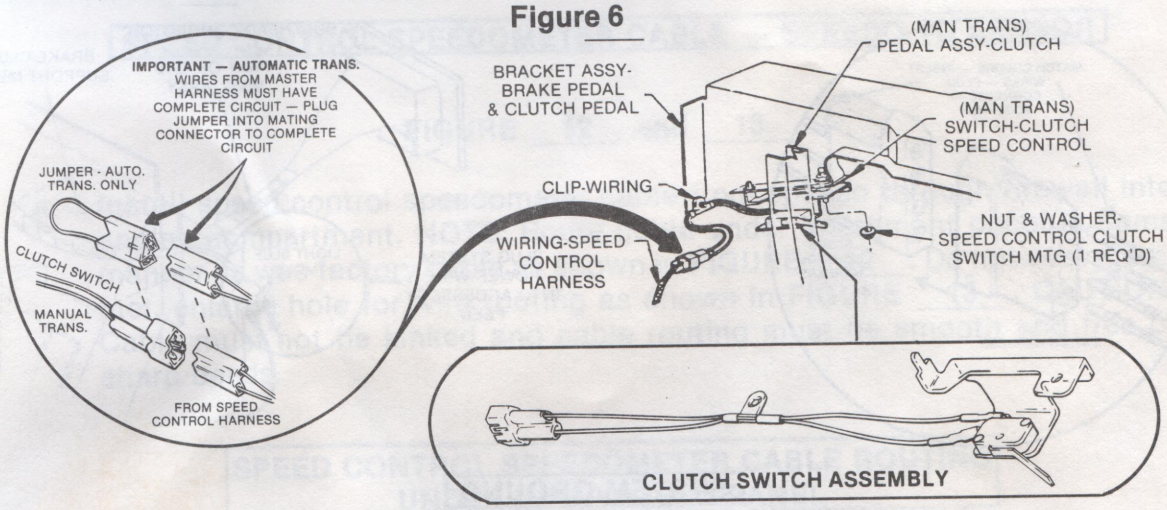
WIRING — AUTOMATIC TRANSMISSIONS

FIGURES 6 and 7

b. **AUTOMATIC TRANSMISSION ONLY** — clutch switch connector-(circuit) must be completed. Plug jumper wire with connector into mating connector from master speed control harness.

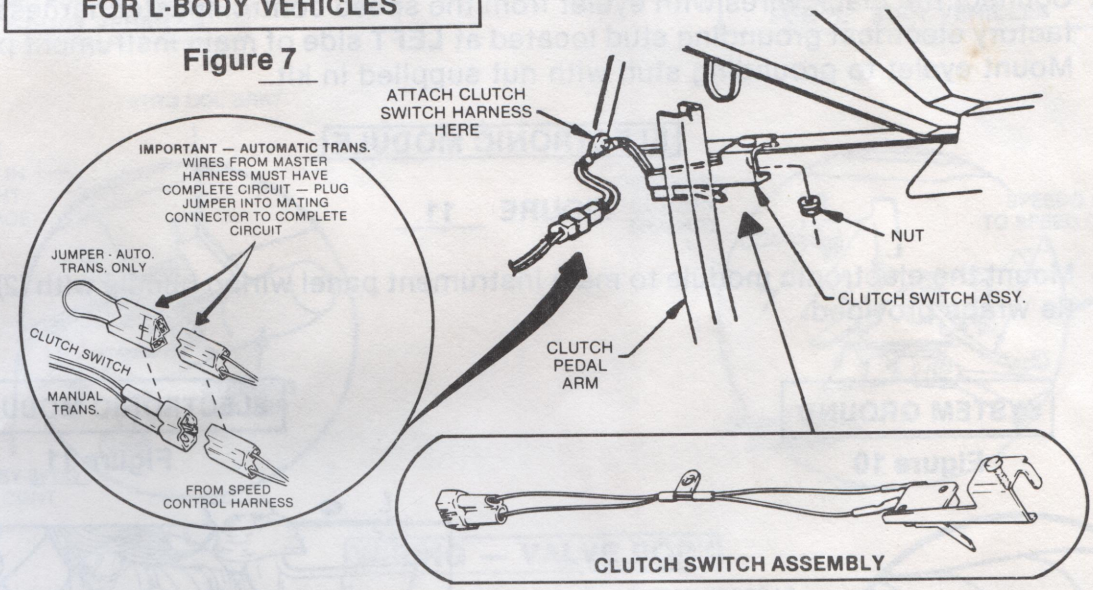
CLUTCH SWITCH INSTALLATION FOR K, E-BODY VEHICLES

Figure 6



CLUTCH SWITCH INSTALLATION FOR L-BODY VEHICLES

Figure 7



WIRING — SPEED CONTROL COMMAND SWITCH LEVER

FIGURE 8

☐ 6. Plug the (4-pin) connector (provided loose in the speed control command switch lever sack kit) into mating connector from master speed control harness. Matching colors, insert each wire/terminal from switch lever harness into appropriate mating connector cavities.

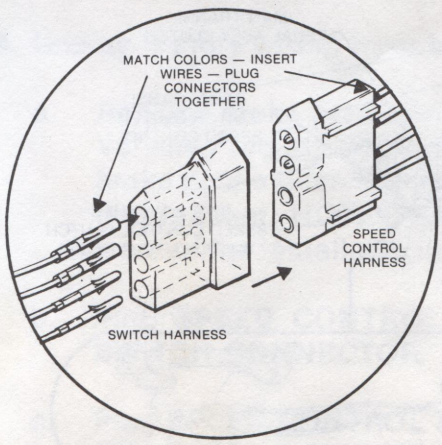
SYSTEM POWER

FIGURE 9

☐ 7. Plug the yellow wire with a small molded bullet terminal from the master speed control harness into a light blue molded 3-pin connector (accessory feed) extending from the main cab wiring (under instrument panel) at the left (driver's side) kick panel.

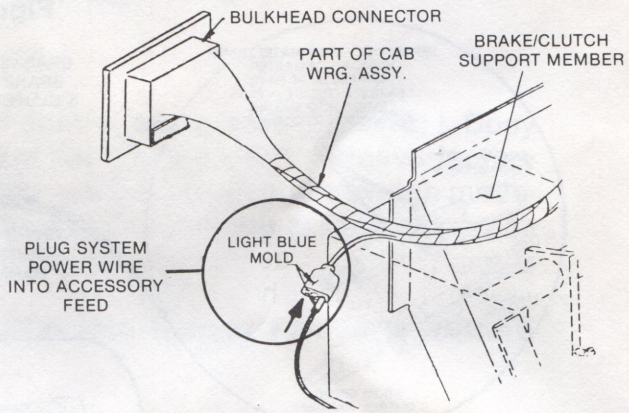
WIRING — SPEED CONTROL SWITCH

Figure 8



SYSTEM POWER — ACCESSORY FEED

Figure 9



SYSTEM GROUND

FIGURE 10

☐ 8. Connect the black wires with eyelet from the speed control master harness to a factory electrical grounding stud located at **LEFT** side of main instrument panel. Mount eyelet to grounding stud with nut supplied in kit.

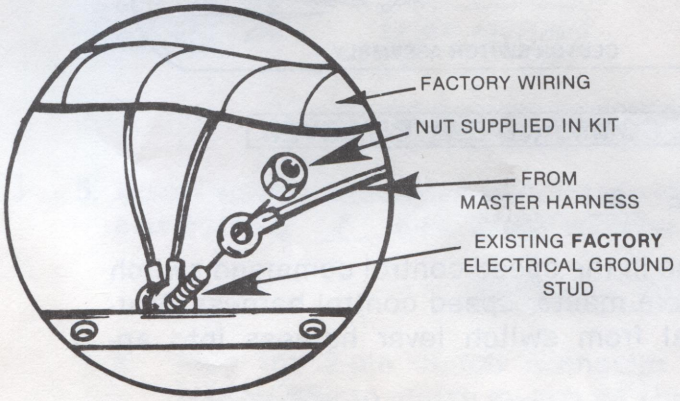
ELECTRONIC MODULE

FIGURE 11

☐ 9. Mount the electronic module to main instrument panel wiring bundle with (2) two tie wraps provided.

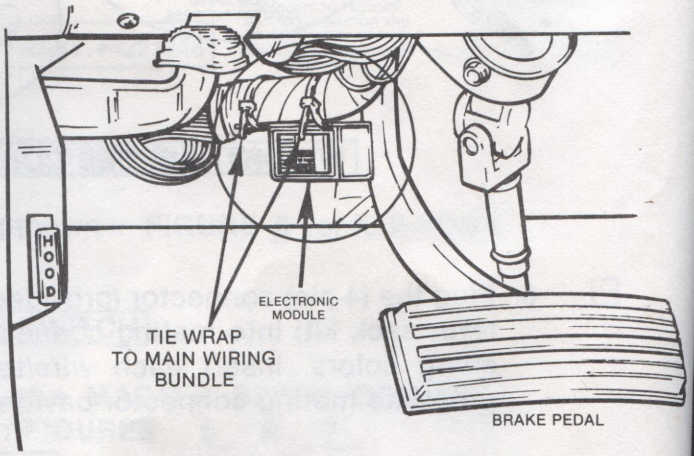
SYSTEM GROUND

Figure 10



ELECTRONIC MODULE

Figure 11



FACTORY SPEEDOMETER CABLE

FIGURE 12

☐ 10. Remove existing (1 piece) **FACTORY SPEEDOMETER CABLE** (with grommet) from **SPEEDO** head and cut grommet off. Push cable through firewall into engine compartment. **NOTE ROUTING UNDER INSTRUMENT PANEL TO FIREWALL.**

a. **NOTE:** Do not remove and replace **FACTORY** speedometer cable if cable is a **2-PIECE CABLE WITH SPEED SENSOR INSTALLED INLINE.** Cable should be connected together with sensor at firewall in engine compartment.

SPEED CONTROL SPEEDOMETER CABLE — SPEEDO TO SENSOR

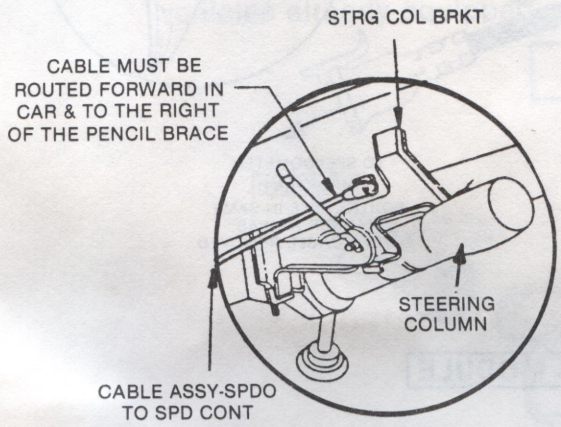
FIGURE 12 and 13

a. Install speed control speedometer cable from speedo through firewall into engine compartment. **NOTE:** Route cable under instrument panel in same manner as was factory cable as shown in **FIGURE 12**. Do not seat grommet, enlarge hole for wire routing as shown in **FIGURE 13**. **CAUTION:** Cable must not be kinked and cable routing must be smooth and free of sharp bends.

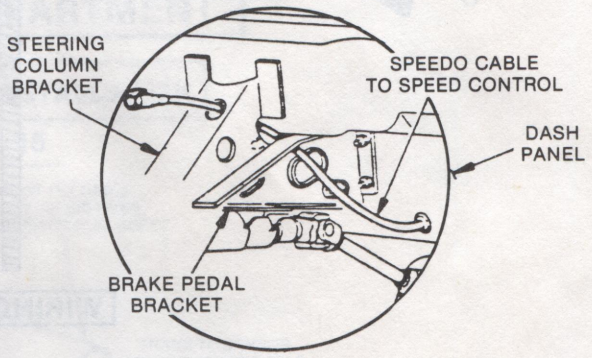
SPEED CONTROL SPEEDOMETER CABLE ROUTING UNDER INSTRUMENT PANEL

Figure 12

SPEEDOMETER CABLE ROUTING UNDER INSTRUMENT PANEL FOR K, E-BODY VEHICLES



SPEEDOMETER CABLE ROUTING UNDER INSTRUMENT PANEL FOR "L" BODY VEHICLES



WIRING — VALVE BODY

FIGURE 13

☐ 11. Route the valve body terminals (4-molded bullet terminals) through (enlarged) speedometer grommet hole and into engine compartment.

WIRING — SPEED SENSOR

FIGURE 13

☐ 12. Route the speed sensor 2-pin molded connector through (enlarged) speedometer grommet hole and into engine compartment.

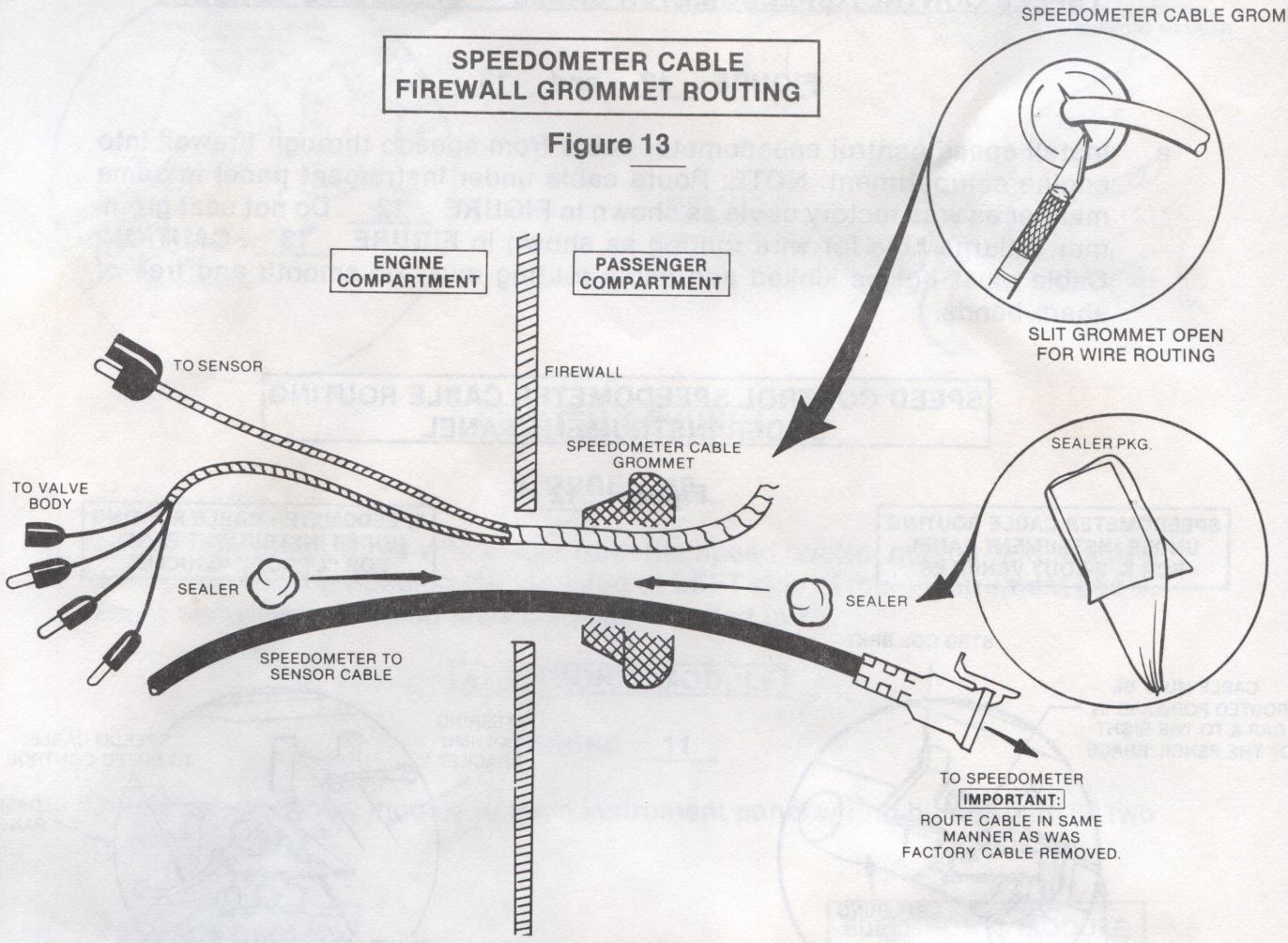
WIRING — CAB

☐ 13. Route all wiring together in a parallel path and/or perpendicular to each other. Use existing cab harness clips/clip straps if possible. Tie wrap all wires to existing bundles to prevent interference with sharp edges or moving parts.

☐ 14. Pull all excess wiring into engine compartment and seat speedometer grommet. Use sealer package provided as shown.

SPEEDOMETER CABLE FIREWALL GROMMET ROUTING

Figure 13



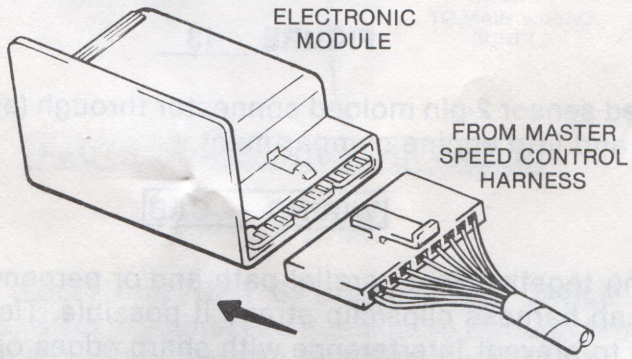
WIRING — ELECTRONIC MODULE

FIGURE 14

☐ 15. Plug the 9-pin connector from master harness into electronic module. Insure connector locks into module housing.

WIRING — ELECTRONIC MODULE

Figure 14



ENGINE COMPARTMENT

☐ 16. Remove air cleaner and note placement of all vacuum and emission hoses.

FACTORY SPEEDOMETER CABLE

☐ 17. Remove factory (1-piece) speedometer cable (disconnected from speedometer) from transmission and discard. Do not discard retaining clips. Note routing in engine compartment.

SPEEDOMETER CABLE — TRANSMISSION TO SPEED SENSOR

a. Install speedometer cable to transmission and route cable in same manner as was factory cable and extend up to cable from speedometer at firewall. Use same existing factory retaining clips. **CAUTION:** Cable must not be kinked and cable routing must be smooth and free of sharp bends. Cable ferrule must be firmly seated into transmission adaptor.

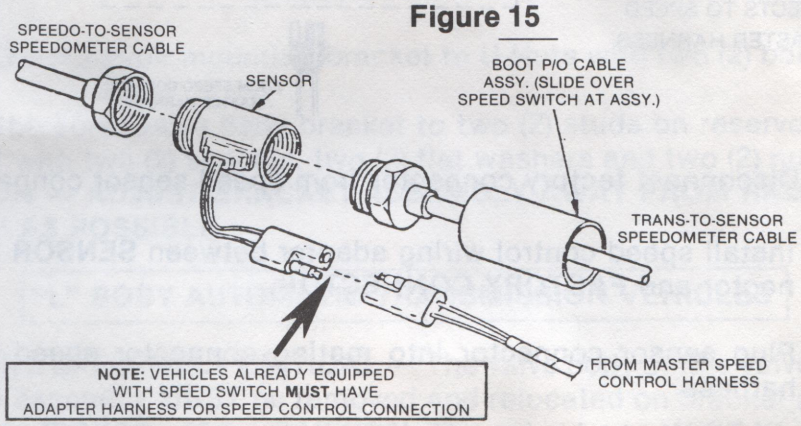
VEHICLE SPEED SENSOR

☐ 18. Install the speed control speed sensor between the speedometer-to-sensor and transmission-to-sensor cables as shown in **FIGURE 15 . NOTE:** Disregard on vehicles already equipped with factory sensor (travel computer switch.)

ENGINE COMPARTMENT

SPEED SENSOR INSTALLATION

Figure 15



WIRING — SPEED SENSOR

FIGURE 15

☐ 19. Plug the speed sensor 2-pin molded connector from the master harness (extending through firewall) into sensor mating connector.

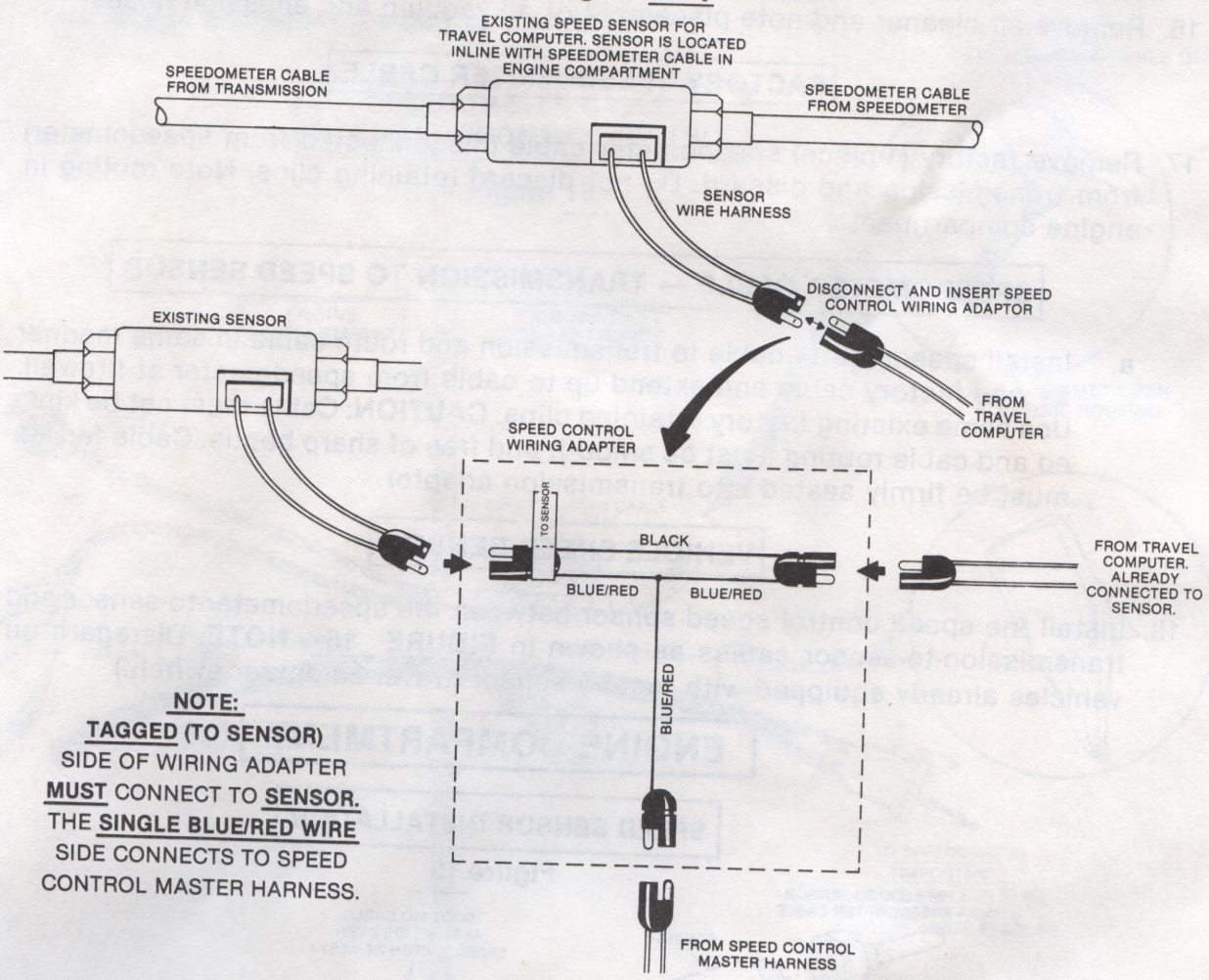
WIRING — FACTORY INSTALLED SPEED SENSOR (TRAVEL COMPUTER SWITCH)

FIGURE 15-1

a. Vehicles already equipped with **FACTORY INSTALLED** speed sensor (travel computer switch) **MUST** install speed control wiring adapter to connect speed control master harness to existing factory wiring.

WIRING — FACTORY INSTALLED SPEED SENSOR (TRAVEL COMPUTER SWITCH)

Figure 15 -1



NOTE:
TAGGED (TO SENSOR) SIDE OF WIRING ADAPTER **MUST** CONNECT TO **SENSOR.** THE **SINGLE BLUE/RED WIRE** SIDE CONNECTS TO SPEED CONTROL MASTER HARNESS.

1. Disconnect factory connector from speed sensor connector.
2. Install speed control wiring adapter between **SENSOR HARNESS** connector and **FACTORY CONNECTOR.**
3. Plug sensor connector into mating connector speed control master harness.

SPEED CONTROL SPEEDOMETER CABLE — SENSOR BOOT

FIGURE 15

b. Slide water boot on speedometer cable (transmission-to-sensor) over speed sensor assembly.

SERVO — VALVE BODY BRACKET ASSEMBLY

FIGURE 16

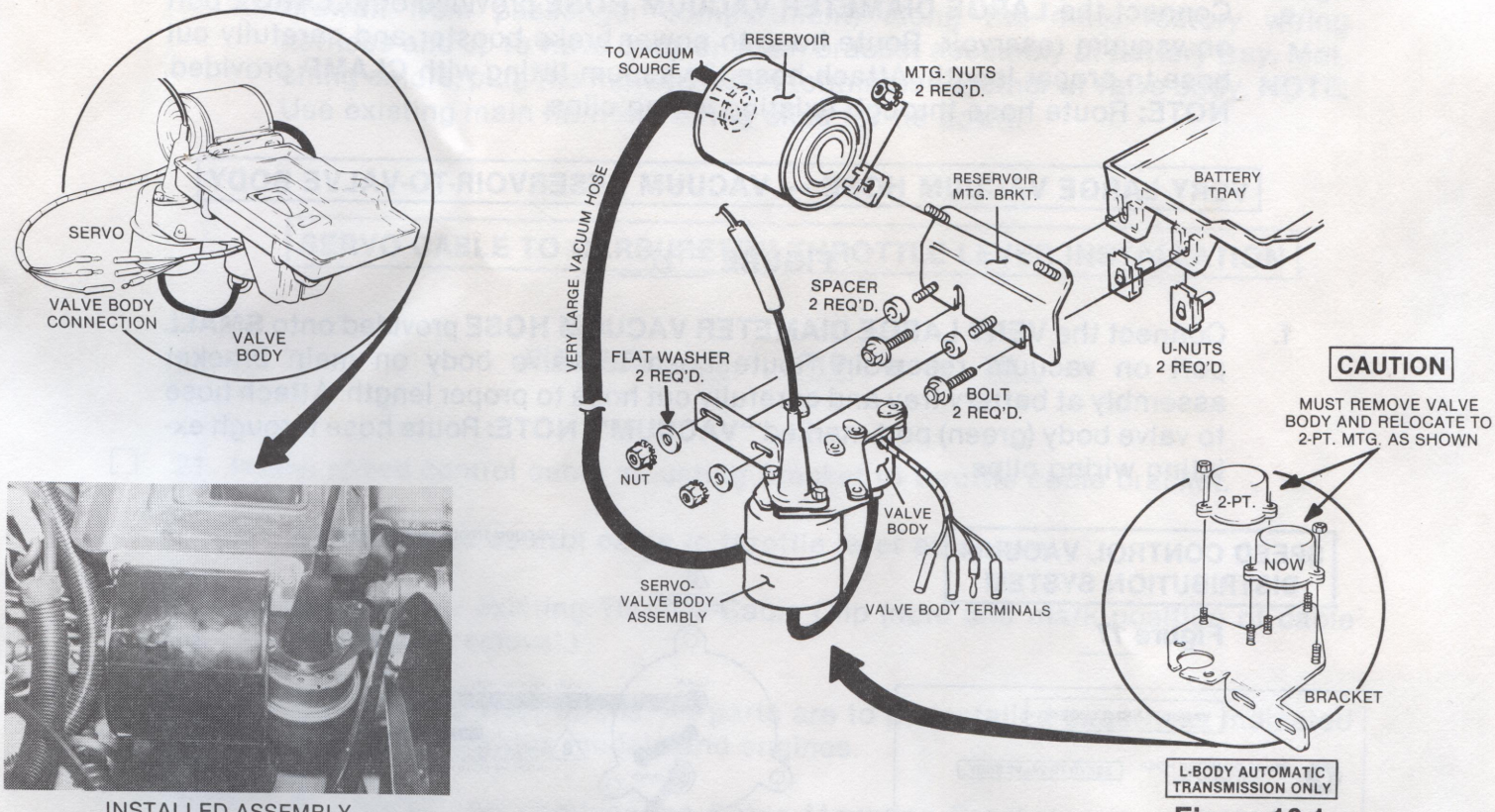
☐ 20. Install the servo-valve body bracket assembly to battery tray.

a. Install the two (2) U-Nuts provided to battery tray.

ENGINE COMPARTMENT

SERVO-VALVE BODY-RESERVOIR INSTALLATION

Figure 16 AND PHOTO



INSTALLED ASSEMBLY

Figure 16-1

b. Mount the reservoir mounting bracket to U-Nuts with two (2) bolts provided.

c. Mount the servo-valve body bracket to two (2) studs on reservoir mounting bracket with two (2) spacers, two (2) flat washers and two (2) nuts supplied. **CAUTION — ADJUST BRACKET ASSEMBLY AWAY FROM RADIATOR FAN AS FAR AS POSSIBLE.**

"L" BODY AUTOMATIC TRANSMISSION VEHICLES

CAUTION: EXTREMELY CRITICAL — The valve body on the valve body-servo bracket assembly **MUST** be removed and relocated on bracket assembly as shown in **FIGURE 16-1 . CAUTION:** The valve body **MUST** be relocated to provide **UNOBSTRUCTED** movement of transmission linkage at **TRANSAXLE.**

VACUUM RESERVOIR

FIGURE 16

d. Mount the reservoir to two (2) studs on reservoir mounting bracket with two (2) nuts supplied. **NOTE:** On some installations, the reservoir cannot be mounted on bracket due to interference and **MUST** be mounted separately with (2) self-tapping screws supplied.

1. Mount reservoir in air plenum area where wiper motor is located. **NOTE:** Vacuum hoses to reservoir must be routed through plenum grommet.

LARGE VACUUM HOSE — VACUUM RESERVOIR TO POWER BRAKE BOOSTER

FIGURE 17

e. Connect the **LARGE DIAMETER VACUUM HOSE** provided onto **LARGE** port on vacuum reservoir. Route hose to power brake booster and carefully cut hose to proper length. Attach hose to vacuum fitting with **CLAMP** provided. **NOTE:** Route hose through existing wiring clips.

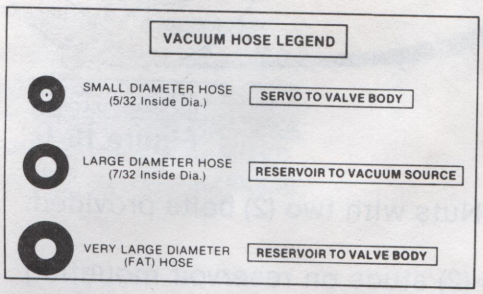
VERY LARGE VACUUM HOSE — VACUUM RESERVOIR-TO-VALVE BODY

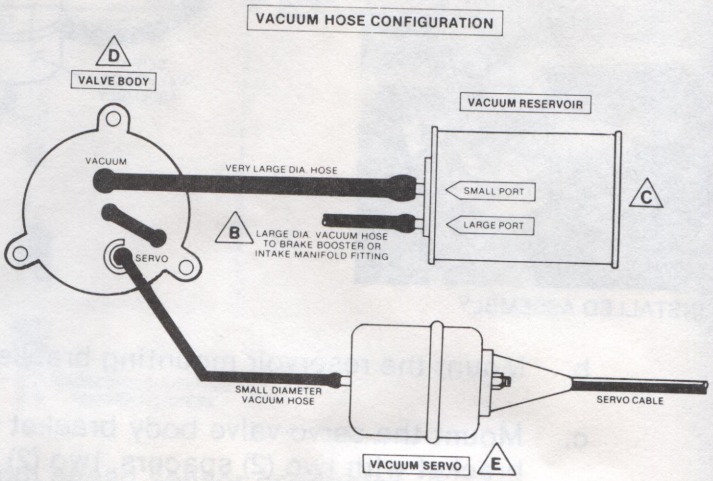
FIGURE 17

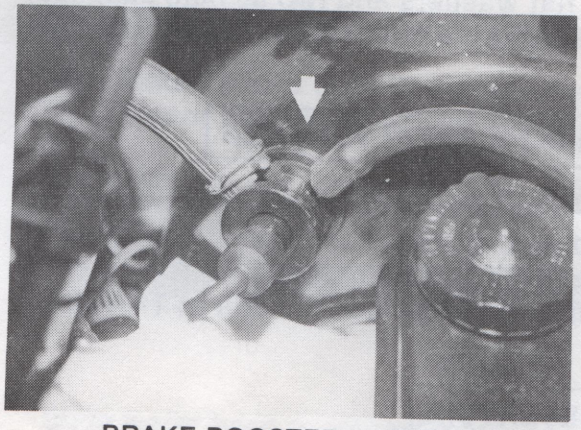
f. Connect the **VERY LARGE DIAMETER VACUUM HOSE** provided onto **SMALL** port on vacuum reservoir. Route hose to valve body on main bracket assembly at battery tray and carefully cut hose to proper length. Attach hose to valve body (green) port marked **"VACUUM". NOTE:** Route hose through existing wiring clips.

SPEED CONTROL VACUUM DISTRIBUTION SYSTEM

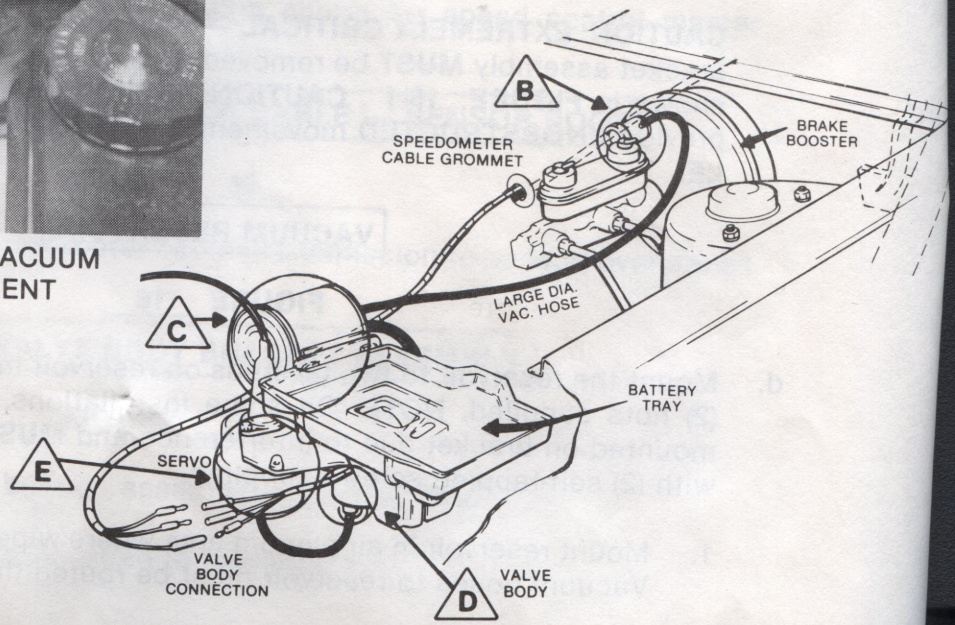
Figure 17







BRAKE BOOSTER VACUUM HOSE ATTACHMENT



WIRING — VALVE BODY

g. Route the valve body molded bullet terminals (4 each) (extending through firewall from passenger compartment) along the main factory wiring harness and up to valve body on main bracket assembly at battery tray. Matching colors, plug the molded bullet terminals together at valve body. **NOTE:** Use existing main harness wiring clips for tie down.

SERVO CABLE TO CARBURETOR THROTTLE LEVER INSTALLATION

FIGURES 18 , 19 and 20

☐ 21. Install speed control cable mounting bracket to throttle cable bracket.

a. Attach speed control cable to throttle lever as shown.

1. Remove existing Throttle Cable Clip (note and mark position of cable before removal.)

   Refer to illustrations. All parts are to be installed exactly as indicated for the various models and engines.

2. Install new combination Cable Mounting Bracket using existing stud and nut and washer assemblies. (Torque to 45 in. lbs.)

   NOTE: Before tightening, be sure that Throttle Cable Clip is clamped in original position.

   Loosely remount original Throttle Cable Clip on stud of new Cable Mounting Bracket.

3. Install Lost Motion Link on Carburetor Throttle Lever in accordance with illustration and make sure that the Lost Motion Link pivots without mechanical bind.

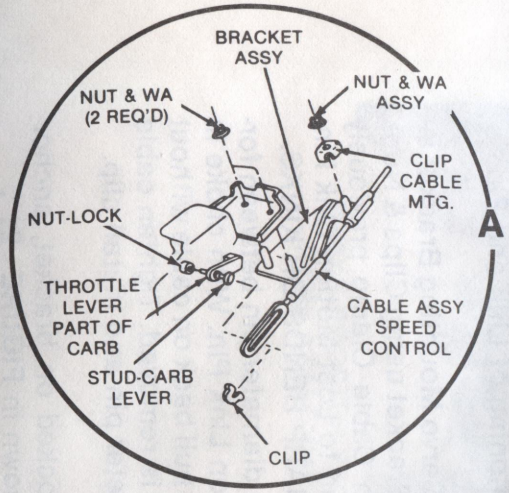
   CAUTION: Check illustration for proper positioning of Link and Pin.

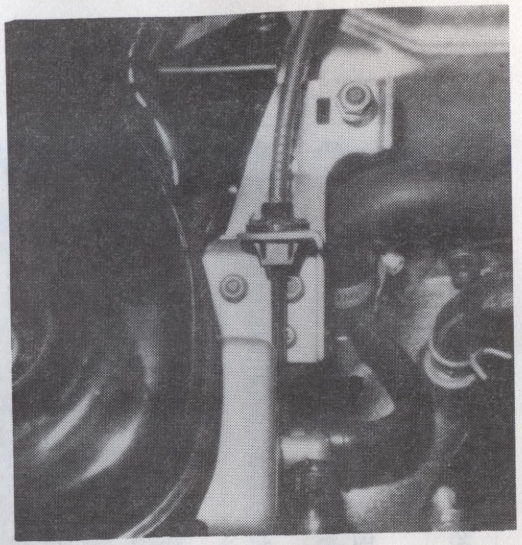
4. Route Speed Control Throttle Cable through Servo Mounting Bracket as illustrated. Attach Servo to cable flange and Bracket using Clips & Nuts. (Torque to 32 in. lbs.). Route cable through Cable Clamp previously mounted loosely on engine. Attach Cable End to Lost Motion Link Pin, do not tighten clamp at this time. AVOID SHARP BENDS OR KINKS.
5. To obtain proper free play, insert a 1/16 inch diameter pin between forward end of slot in cable end and Lost Motion Link Pin. With choke in full open position and carburetor at curb idle, pull back on cable without moving carburetor linkage until all free play is removed. Tighten cable clip nut to 45 in. lbs., remove 1/16 inch diameter pin and install clip.

   NOTE: Once servo cable is adjusted and locked on bracket, anchor cable to panel above radiator with clip as shown in **FIGURE 21 .**

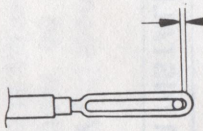
CABLE MOUNTING AND LINKAGE INSTALLATION FOR 2.6L ENGINE K, E-BODY VEHICLES

Figure 18

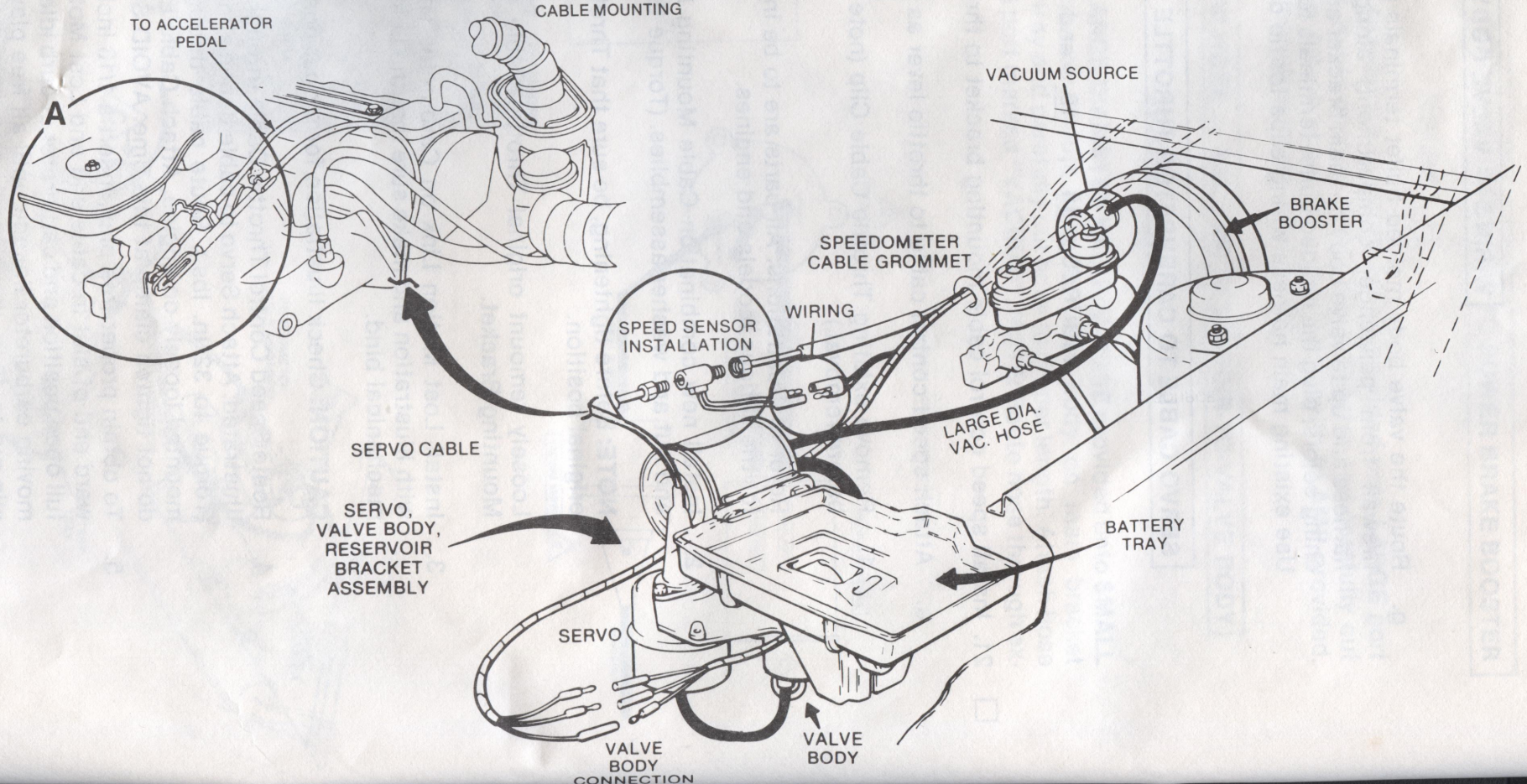




CABLE MOUNTING

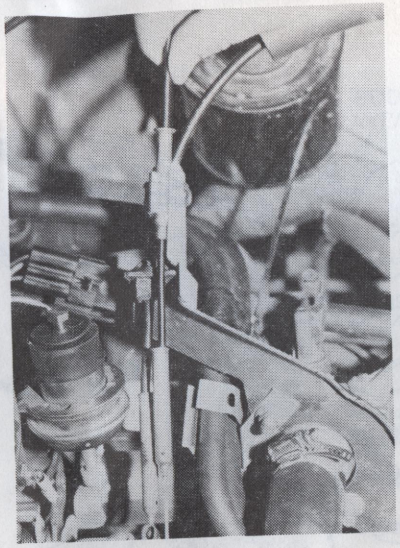


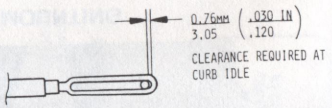
ADJUSTMENT



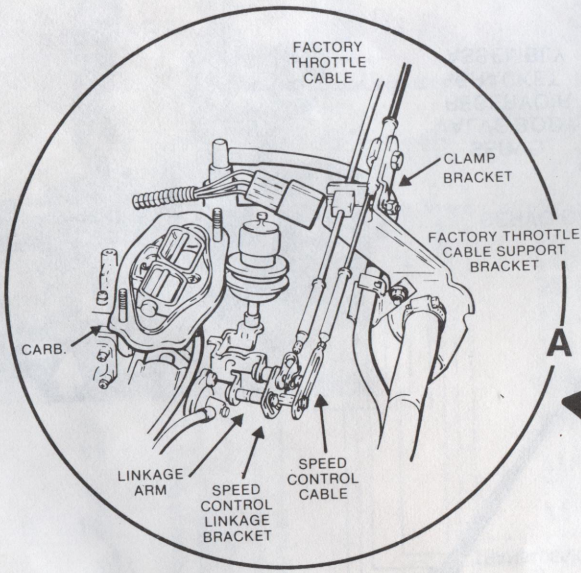
CABLE MOUNTING AND LINKAGE FOR 1.6L ENGINE L-BODY VEHICLES

Figure 19

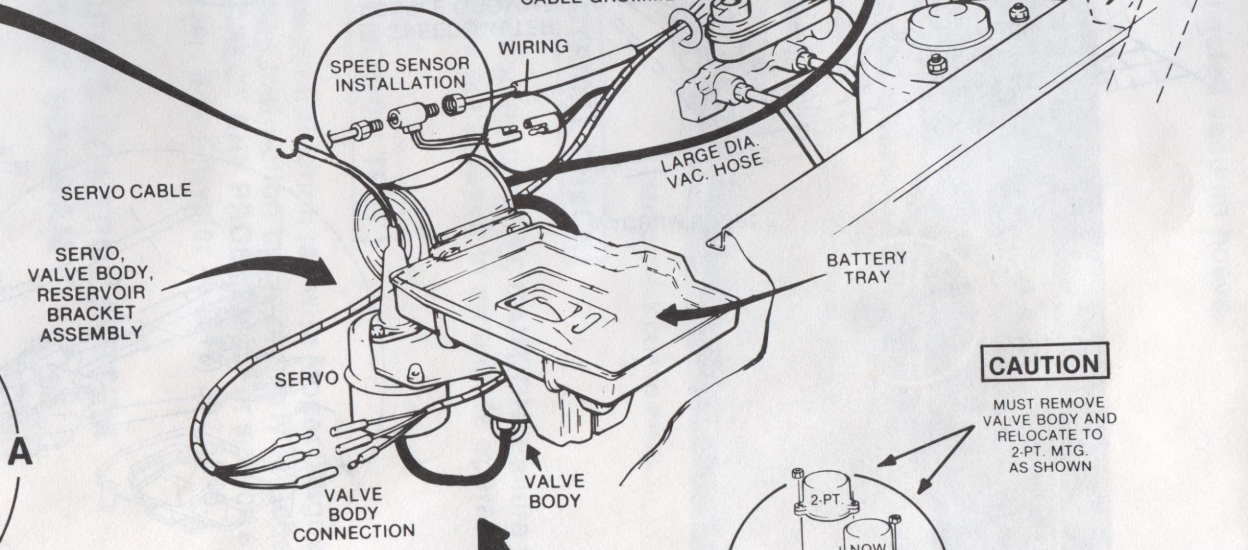


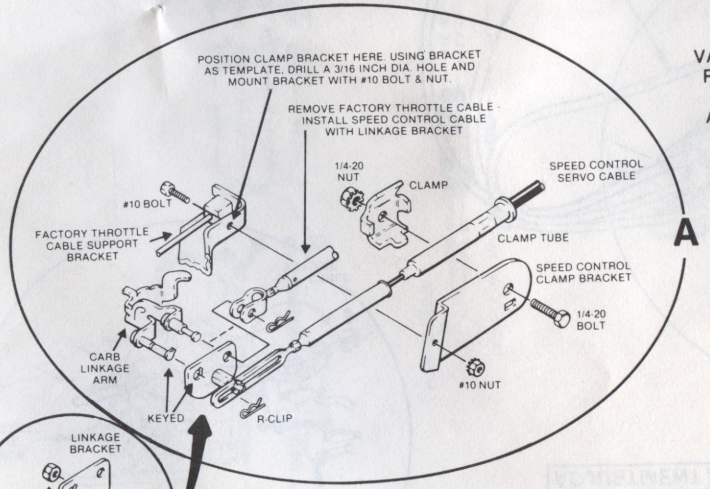


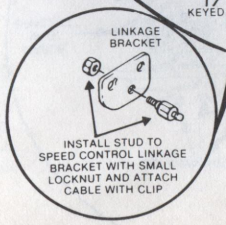
ADJUSTMENT



CABLE MOUNTING

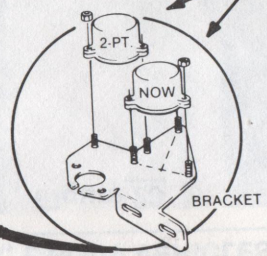






CAUTION

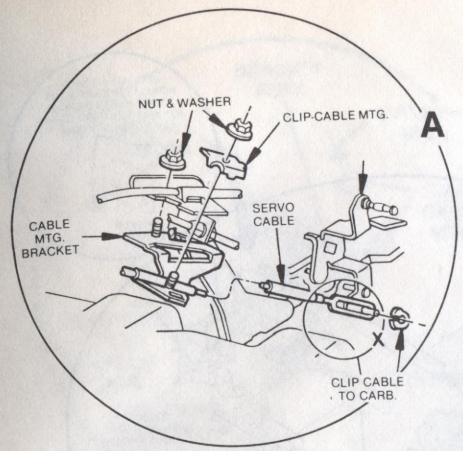
MUST REMOVE VALVE BODY AND RELOCATE TO 2-PT. MTG. AS SHOWN

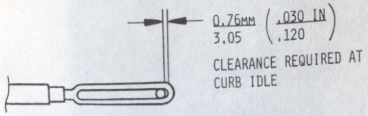


L-BODY AUTOMATIC TRANSMISSION ONLY

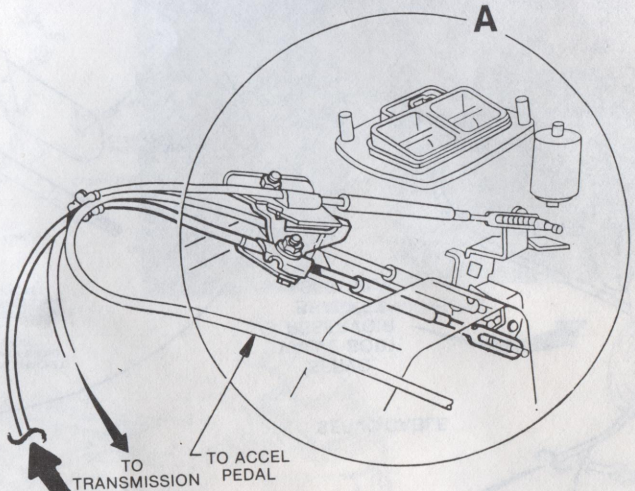
CABLE MOUNTING AND LINKAGE FOR 2.2L ENGINE L, K, E-BODY VEHICLES

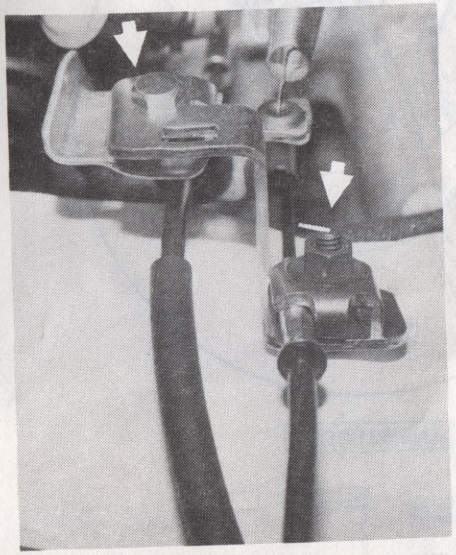
Figure 20



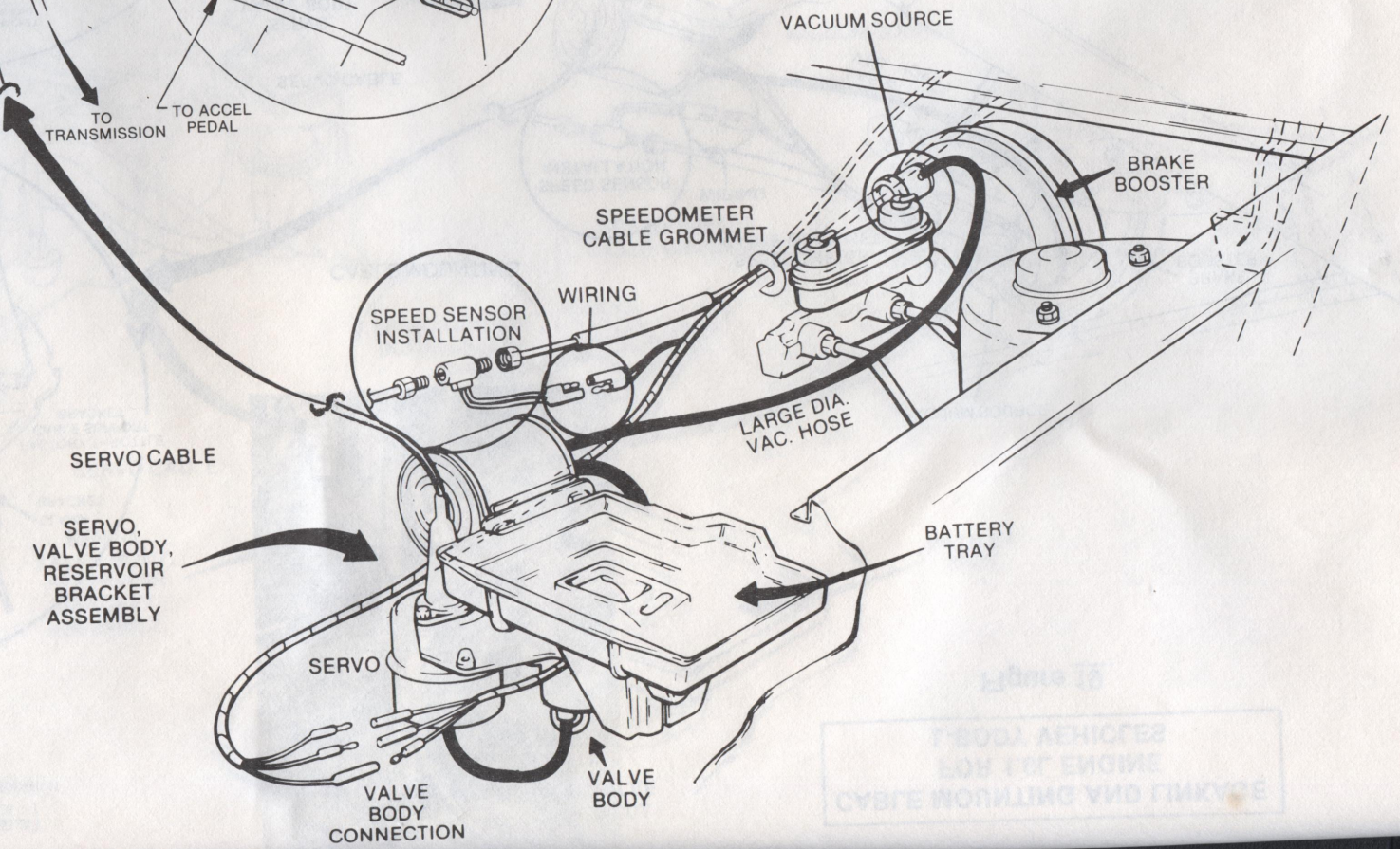


ADJUSTMENT





CABLE MOUNTING

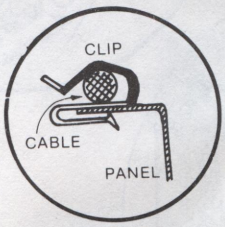


☐ 22. Replace air cleaner and all disconnected vacuum hoses.

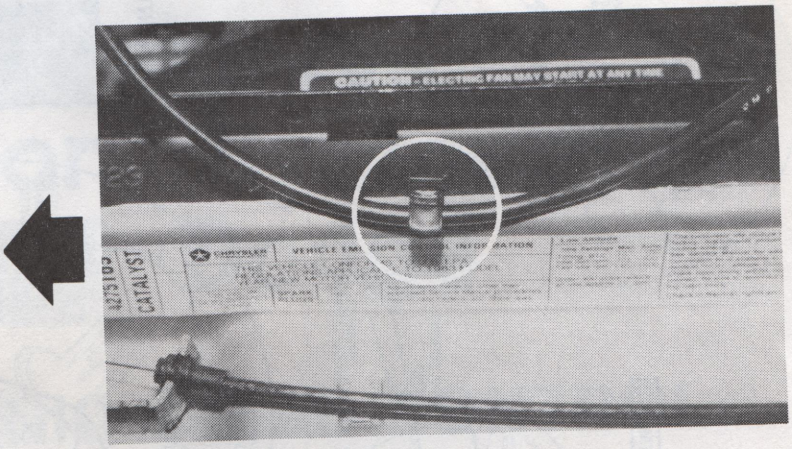
☐ 23. Reconnect battery ground cable.

SERVO CABLE CLIP

FIGURE 21



SIDE VIEW



SERVO CABLE CLIP TO PANEL

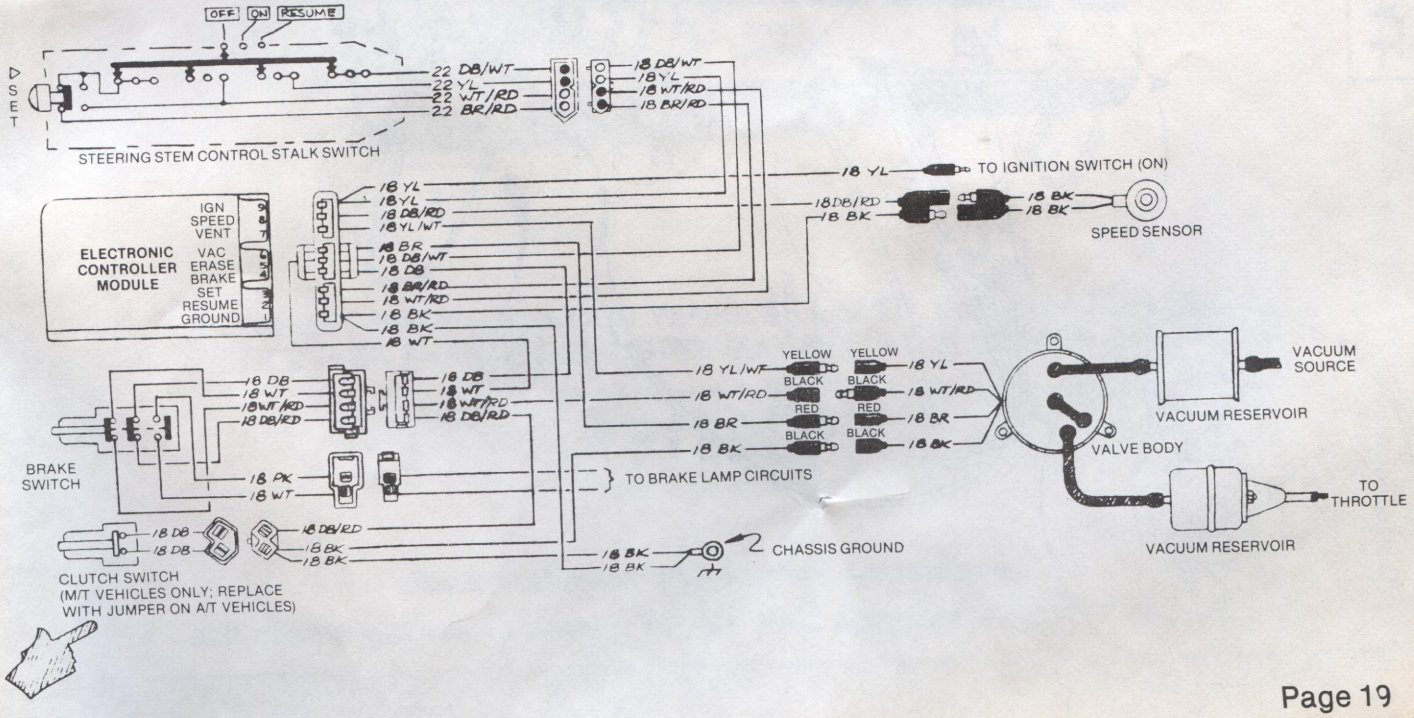
ELECTRICAL CHECK

☐ 24. Check to see if stop lamps are functioning properly. **CAUTION:** Failure to follow the above instructions or procedures could result in an unsafe operating condition.

FUNCTION TEST

☐ 25. Road test or check all functions as per intruction tag with Mopar Diagnostic Test-Simulator. Insure owner's operating instruction tag is properly attached to rear-view mirror. **DIAGNOSE AND CORRECT ANY PROBLEMS.** For service assistance call collect person-to-person for Mr. S.C. Chrysler — (817) 332-5348.

ELECTRONIC SPEED CONTROL SYSTEM SYSTEM DIAGRAM



TYPICAL INSTALLATION LAYOUT